

The VTEA Scene

2004 -2005 Winter Newsletter

Volume XVIII, Issue I

2004 VTEA Summer Institute

~Bob Dunn

We live in a technological world where human-made items extend our capabilities for many purposes, including entertainment. Creating music is a uniquely human experience that requires creativity and invention. Musical instruments extend our capabilities just as any appliance would – they enable us to expand the range of sounds that we can produce. Like other technologies, we must understand many scientific and mathematical concepts in order to create musical instruments. In a technology education classroom, we must apply many of these concepts before we are able to design and create musical instruments. What is the scientific explanation for the difference between music that is pleasing to the ear and noise? How can music be explained using mathematical patterns? What is the nature of materials? These questions and more were part of this year's Institute.

Nine participants and five instructors spent a week at Crossett Brook Middle School in early July learning about a model that connects science, mathematics, and technology to make musical instruments. Projects included making a pvc flute and constructing a mountain dulcimer. Participants were also required to perform with their instruments. Guest presenters included North Country teachers Brad Rokos (information technology), Don Maloney (mathematics), Lucie DeLaBruere (gender equity) and me. In addition, Topher Waring from Lake Region provided us with many hands-on physics projects.

The food was good and the company was even better. Participants worked together and shared their experiences with each other. Summer institute week is a unique time where we can get together and spend time with some of our colleagues while learning new things that we can use in our classrooms. Check out the pictures on the VTEA website: <http://www.state.vt.us/educ/vtea>. Try out our movies and the mp3 tracks that we recorded with our flutes and dulcimers.

Do you have some ideas for next year's institute? If so, let us know.



2004 VTEA Annual Meeting

The VTEA Spring Conference and Business Meeting was held at VTC Friday May 7, 2004. The morning agenda included three excellent presentations by Pat Delago from Destination Imagination, Frank Cencerone from RJT and 3D printing and Tate Jackson from TRAC. After lunch, we participated a very informative Interactive TV presentation with Dr. Randy Lindeman from NASA on the recent Mars robotic mission.

Business Meeting : A "roundtable discussion" was held where a number of topics were available for comment upon. Our summer institute discussion determined that summer institute guidelines should be developed over the summer for the planning and execution of future summer institutes. Long has the topic of a statewide competition been a subject of discussion.

Opened to the VTEA members and attendees of the spring conference, a number of comments were logged. Items mentioned for competition were the Solar Sprint, a structure competition, and perhaps something to overlap at the National Science Teacher's Convention. The VTEA's presence at conferences/workshops was requested to increase and it was determined that we should begin planning for any competition as early as possible.

The newsletter as an e-file will help spread information to members more quickly and at a decreased cost to traditional snail-mail methods. In the future, the newsletters may be only emailed, however, transitionally, they will be both emailed and snail-mailed. Officer/ Executive Board Elections :

Following nomination and vote, the following were elected to represent the VTEA for the school year 2004-05: Past President- Dennis Ferrari, President – John Plas, President Elect – Dave Bazis, V.P. – open, Secretary – Dan Treinis, Treasurer – Len Hanson, Newsletter – Bob Lindemann, Webmaster – Bob Dunn, Members at Large : Dick Swanson, Ted Burton, George Agnew, Paul Noiseux. ITEA Rep. Dan Airolti, State Tech. Ed. Task Force : Ted Burton – Consultant/contact person, Dennis Ferrari , Dan Airolti





President - John Plas

President Elect - Dave Basis

Vice President - Vacant

Past President - Dennis Ferrari

Secretary - Dan Treinis

Treasurer - Len Hanson

Newsletter - Bob Lindemann

ITEA Rep - Dan Airoidi

Website - Bob Dunn

Members At Large:

George Agnew

Dick Swanson

Ted Burton

Paul Noiseux

State TechEd Task Force:

Ted Burton - Contact

Dan Airoidi - Consultant

Dennis Ferrari - Consultant

The mission of the Vermont Technology Education Association is to promote excellence in technology teaching and works to increase the effectiveness of educators to empower all people to understand, apply, and assess technology

President's Report

~John R. Plas, President VTEA

I'm back! As I sit down and try to remember what I've been up to over the years, I'm struck by how quickly time has past and much our organization has changed. Programs like Project Lead the Way, Trak, are helping us find our way thru the endless political, social and educational initiatives being thrust upon us by outside and inside influences. NCLB has turned our schools into testing halls, graphs and statistics. Still, at the core of most of it lies Technology.

I've been impressed by the dedication and determination of those individuals on the executive board. They are the guardians of our discipline making sure our voice are heard and Technology Education continues to BE an important part of each child's education in the state of Vermont.

As part of our continued effort to promote technology education in the state of Vermont, We have developed some goals for the VTEA to include: 1) promote technology education as career for our students. We have programs in Vermont and nationally that go unfilled for lack of a qualified Tech Ed teacher. It is a good living and there are jobs out there, let's try to fill them with our best students. 2) Lobby for a representative at the state level for technology education. We have been without representation for too long, let's advocate for this. 3) Develop a game plan for those programs in danger of elimination. I'd like to try to do more for those programs in need. If you are about to retire or you have reason to believe your program may be in danger of being eliminated, contact us and let us know, might be able to help.

The demands on all of education are continuing to increase. Together we can make things happen we have in the past and we still can. The VTEA exists to support the Technology education teachers for state of Vermont. Let us know if we can help. Have great year.

VTEA Executive Board Meetings

The VTEA Executive Board Meets the third Thursday each month in Montpelier at the Department of Education. The meetings start at 4:30. All VTEA members are welcome to attend, or sent comments to your representatives to bring to the Executive Board. Minutes are kept by secretary Dan Treinis, and emailed to board members after each meeting. Members wishing copies of the minutes should contact him.

Meeting dates for the remainder of this school year are: February 17th, March 17th, April 14th, May 19th. An important topic at this time is planning for our annual Spring Conference. If you have ideas what you would like to see at the conference or ideas for presenters, please contact your VTEA officers or board members.

ITEA Membership Opportunity

If you are not a current ITEA member, or if you were a member at one time and have been lapsed for over 3 years, you can receive a full year of membership for only \$25...that's a discount of nearly 65%. PAXTON/PATTERSON is subsidizing first year memberships to stimulate growth in ITEA. They are committed to technology education and the work of ITEA. Members receive:

- \$250,000 Professional Liability insurance coverage
- 8 issues of The Technology Teacher, the leading professional journal of technology education
- 24-hour access to online resources and teacher forum
- Opportunity to help set the direction of ITEA and the profession

JOIN TODAY online at <https://www.iteaonline.org/MembershipAppPaxPat.html>.

Lari Price, Coordinator of Member Services

International Technology Education Assn.

1914 Association Dr., Suite 201

Reston, VA 20191-1539 (703-860-5032)



2005 VTEA Mini - Grants

VTEA Mini - Grants

Pending final approval of the VTEA proposed budget, we will be developing a Mini-Grant program. The grants will be available to TechEd teachers in Vermont for up to \$500. The grants may be used for program improvement, curriculum development and support, and professional development. The application process will be kept simple, send a letter of application explaining your proposal, a proposed budget, and how this grant will be used to improve your TechEd program to:

John Plas, VTEA President

Riverside Middle School

Fairground Road

Springfield, Vermont 05156

jplas@springfield.k12.vt.us

2004 VTEA Teacher/Program Awards

This year, after reviewing the applications, and adopting new procedures followed by other State organizations, we reexamined how we award our Teacher and Program awards. At our 2004 Annual meeting, the VTEA presented awards to the following teachers:

President's Award : George Agnew (retired)

High School Teacher of the Year : Bob Dunn

Middle School Teacher of the Year : Dan Airoidi

High School Program of the Year : Steve Barner

Middle School Program of the Year : Jay Hoffman



2005 Program/Teacher Excellence Procedure

Each Year at the VTEA Spring Conference we recognize outstanding TechEd Educators with our Teacher and Program Excellence Awards. In an effort to improve the nomination process for the 2005 Awards, the procedure for nominating will be extended to teachers as well as administrators. Who better knows an outstanding teacher or program in your school or a colleague you feel should be nominated than our members themselves? We have simplified the nomination process, so if you know of a potential candidate, please consider nominating them.

Teachers may submit nominations for the 2005 Teacher and Program Excellence awards by submitting to VTEA President, John Plas a letter stating the name of the teacher you wish to nominate, the school at which they teach, the award you wish to nominate them for and a brief letter as to why this teacher or program should receive the award based on the criteria for each award.

Nominations must be received by March 25, 2005. Judges knowledgeable in the field will be chosen by the VTEA Executive Board to review nominations, and select the award recipients. Please include your school address, phone number and email address, should the judges wish to contact you for additional information.

Send Applications To:

John Plas, VTEA President

Riverside Middle School

Fairground Road

Springfield, Vermont 05156

jplas@springfield.k12.vt.us

2005 VTEA Spring Conference

Mark your calendars... the 2005 VTEA Spring Conference and Annual Meeting is tentatively scheduled for Friday, May 6, 2005 at the Langevin House at Vermont Technical College. Details to follow...

Clubs & Competitions

~From Nancy Leon @ NASA Jet Propulsion Lab

Here is a list of science and technology clubs and competitions, some of which may be available in your community. These are all designed to heighten the interest of middle and high school students in math, science, and physics by designing, building and experimenting.

Boosting Engineering, Science and Technology (BEST)~ In six weeks, high school or middle school student teams design and build a remote controlled robot to compete against other schools. <http://www.bestinc.org>

Bayer/NSF Award for Community Innovation~ Competition for teams of middle school students to find creative solutions to problems in their communities.~~ <http://www.christophercolumbusawards.com/>

Discovery Young Scientist Challenge~ A national science fair competition for grades 5-8.~ Students are nominated to take place in the DYSC by representatives at their local science fairs.~ 40 finalists will come to Washington for a week in October to participate in the competition finals.~ <http://school.discovery.com/sciencefaircentral/dysc/>

FIRST Robotics Competition~ High school teams build robotics to compete in a national competition.~ <http://www.usfirst.org>

The FIRST LEGO League (FLL): Using LEGO Mindstorms Robotics Invention System technology, middle school student teams build robots to compete in robotics.~ <http://www.firstlegoleague.org>

Future City: National competition in which 7th and 8th graders learn and explore engineering to create a city of the future, using reality-based education software SimCity 2000.~~ <http://www.futurecity.org>

Future Scientists and Engineers of America Club~ Step-by-step instructions on how to start a Future Scientists and Engineers of America Club in your school or neighborhood.~ <http://www.fsea.org>

The Intel International Science and Engineering Fair (Intel ISEF) Held annually in May, the Intel ISEF brings together over 1,200 high school finalists from local and state fairs from 40 nations to compete for scholarships, internships, and the grand prize: a trip to attend the Nobel Prize Ceremonies in Stockholm, Sweden.~ <http://www.sciserv.org>

The Intel Science Talent Search~ High schools students compete their independent research projects in this prestigious competition run by Science Service.~ 10 top scholarship winners are chosen in March with a \$100,000 scholarship as the top prize.~ <http://www.sciserv.org>

The Internet Science and Technology Fair Student teams use the Internet to collaborate with assigned project advisors and research their topic over the course of the school year.~ Teams are judged on the web page that they produce, relating their project and findings.~ <http://istf.ucf.edu>

International Bridge Building Contest~ High school students get a flavor of what it is to be an engineer as they design and construct model bridges. The website gives information on regional contests and starting a new affiliated contest in your area.~ <http://www.iit.edu/~hsbridge>

Junior Engineering Technical Society (JETS) has pre-college engineering programs and competitions, usually for high school students, to design, fabricate and demonstrate a working solution to a social need~~ <http://www.jets.org>

Junior Science & Humanities Symposia (JSHS)~ National program for high school students to compete at forty-eight regional competitions.~ The top finalists receive scholarships.~ <http://www.jshs.org>
Lemelson-MIT High School InvenTeams Grants~ Student-Teacher teams apply for \$10,000 grants to invent something of value for their school or community.~ <http://web.mit.edu/invent/www/InvenTeam/faqs.html>

National Association of Rocketry (NAR)~ Develop and construct an experimental rocket, from initial concept to completed payload.~ Join a NAR club in your area, start a club, compete, or integrate rocket building into your school curriculum.~ <http://www.nar.org>

Odyssey of the Mind~ Annual competition to promote creative team-based problem solving for students from kindergarten through college in a variety of areas, from building mechanical devices to interpreting literary classics.~ <http://www.odysseyofthemind.com>

RI/SME Student Robotic Challenge~ Middle school through university students demonstrate knowledge of robotics and manufacturing technology in regional competitions.~ <http://www.sme.org>

Skills USA~ State and national competitions help high school and college students prove their expertise in 72 skill and leadership development areas, such as precision machining and health care.~ <http://www.skillsusa.org>

Underwater Remotely Operated Vehicle (ROV) Competition~ The Marine Advanced Technological Education (MATE) Center and the Marine Technology Society (MTS) sponsor an underwater ROV design and building competition for high school and college students.~ <http://www.marinetech.org>

Vermont Technology Education Association

Financial Report: January 1, 2005

Checking Account Balance \$4645.69

Savings Account Balance \$2875.98

VTEA MEMBERSHIP

Membership in the Vermont Technology Education helps to build the future of Technology Education. The membership year begins and ends at our annual Spring Conference.

Name: _____

School: _____

City: _____

Membership Status: **New** **Continuing**

Date Paid: _____

VTEA Membership Application

Dues: \$15.00 - Make check payable to VTEA

Send application to:

Len Hanson
Camels Hump Middle School
173 School St
Richmond, VT 05477

What is the ANSARI X PRIZE?

The ANSARI X PRIZE is a \$10,000,000 prize to jump start the space tourism industry through competition among the most talented entrepreneurs and rocket experts in the world. The \$10 Million cash prize will be awarded to the first team that: Privately finances, builds & launches a spaceship, able to carry three people to 100 kilometers (62.5 miles) Returns safely to Earth Repeats the launch with the same ship within 2 weeks The ANSARI X PRIZE competition follows in the footsteps of more than 100 aviation incentive prizes offered between 1905 and 1935 which created today's multibillion dollar air transport industry. For more than 30 years, the general public has waited for an opportunity to enjoy the space frontier on a first-hand basis. The X PRIZE Foundation is working to make space travel possible for all. The spaceships that compete for the ANSARI X PRIZE are designed to carry passengers. Since its inception in May 1996, the X PRIZE Foundation has registered more than 20 teams from seven countries to compete for the prize. XPRIZE was inspired by the early aviation prizes of the 20th Century, primarily the spectacular trans-Atlantic flight of Charles Lindbergh in The Spirit of St. Louis which captured the US \$25,000 (US\$) Orteig prize in 1927. Through a smaller, faster, better approach to aviation, Lindbergh and his financial supporters, The Spirit of St. Louis Organization, demonstrated that a small professional team could outperform a large, government-style effort.

The EGGS PRIZE is a middle-school contest modeled after the \$10 million Ansari X Prize. The contest is designed to support the middle school learning experience. The curriculum, designed by Mid-Continent Research for Education and Learning (McRel) prepares students for the competition with a series of activities that take the form of real-world design scenarios. Each activity focuses student design teams on the math, science, and technology concepts required to solve a design problem over an eight-week period. Because it is intended to mirror the real world Ansari X Prize, The EGGS PRIZE is unique and its content applicable to a variety of students, teachers and settings. To be an EGGS PRIZE winner you must launch a water rocket that you build to an altitude of at least 30 meters (98.4 feet). Instead of a human payload, you are to launch a raw egg to this altitude aboard your water rocket. The egg must survive the flight unbroken. Then within two days, you are to relaunch your egg once again to at least 30 meters (98.4 feet) and have the egg survive the second flight as well.

Editors Note: While driving into school one day I heard on the radio the XPRIZE was about to be won. while I knew of the contest, I had not followed it so after a quick internet search was at least able to watch the WebCast of the final flight with my classes. The EGGS PRIZE would make a good focus for a TechEd class activity. For more information and the curriculum guide check out: <http://www.xprize.org>

VTEA Executive Board

President

John Plas
Riverside Middle School
Fairground Rd, Springfield, VT 05156
School Phone: (802) 885-8490
jplas@springfield.k12.vt.us

Past President

Dennis Ferrari
Burlington HS, 52 Institute Rd.
Burlington, VT 05401
School Phone: (802) 864-8451
Email: dferrari@bsdvt.org

Secretary

Dan Treinis
275 Main St
Edmonds Middle School
Burlington, VT 05401
Dtreinis@bsdvt.org

Treasurer

Len Hanson-
Camels Hump Middle School
173 School St
Richmond, VT 05477
Email: LEN_HANSON@HOTMAIL.COM

Presidnet Elect

Dave Bazis
U-32 High School
Montpelier, VT
Email: Dbazis@U32.org

ITEA Rep

Dan Airoidi
Essex Middle School
60 Founders Rd
Essex Jct , VT 05452
Email: dtmairoidi@yahoo.com

Members At Large:

Dick Swanson
FHT Middle School
500 Dorset Street, So Burlington VT
05403
School Phone: 802-652-7163
Email: Dswanson@sbschools.net

Paul Noiseux
Whitcomb Jr./Sr. High School
PO Box 1002, Pleasant Street,
Bethel, VT 05032
School Phone: 802-234-9966
Email: paulnoiseux@aol.com

George Agnew
Retired TechEd Teacher
Email: luagnew@aol.com

Newsletter:

Bob Lindemann
Lamoille Union Middle School
VT Rte 15 West
Hyde Park, VT 05655
(802) 851-1213
Email: rlindemann@luhs.k12.vt.us

Website:

Bob Dunn
North Country UHS
209 Vetrans Ave
Newport, VT 05855
Bdunn@vtusa.net
(802) 334-7921

State Contact Person

Ted Burton -
Winooski Education Ctr.
80 Normand St
Winooski, VT 05404
Email: tburton@winooski.k12.vt.us
(802) 655-3530 EXT. 134

Vermont Technology Education Association

John Plas, President

Riverside Middle School

Fairground Rd, Springfield, VT 05156